Block mice access into buildings and restricted areas, examples

Allen Dong, PO Box 413, Veneta, OR 97487
https://sites.google.com/view/low-tech-farm-tools

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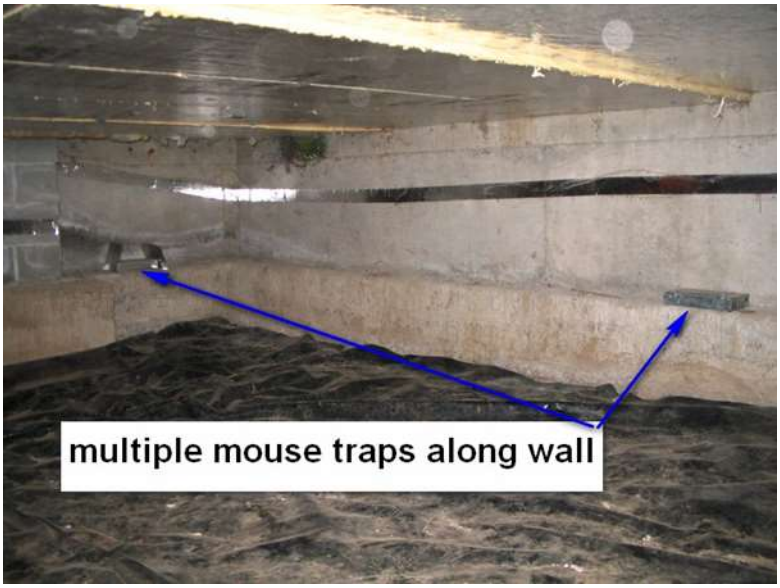
General observations: Mice travel along walls at ground level, smell odor and feel temperature differences in air leaking out of buildings. If there is a small opening with odor or temperature difference, they will try to enlarge the opening to get inside. They go for protected corners to stop, eat, and leaving mouse dropping. Mice cannot climb up stainless steel foil, tape, or plates; or aluminum flashing coated with oil. However, they can climb aluminum surfaces if the aluminum oxidizes and leave a rough surface. Use multiple traps along the inside wall of a building to isolate the area of breach.



Multiple traps deployed along wall in crawl space under a house to locate area of breach

The following are examples of barriers against mice:

Example 1 A removable 17 inch (43 cm) tall metal barrier was installed at a barn door entrance. The barrier was made by cutting a 3 ft (0.93 m) wide metal siding panel in half, lengthwise. Wipe oil on metal panel to reduce traction. Wrap aluminum flashing around bottom of door opening.

Removable, painted metal siding place across barn door entrance

Shine light at bottom of metal panel to identify low spots in the concrete floor; trim bottom edge of metal panel to decrease gap between panel and floor.

Example 2 Gap at the bottom corner of step flashing and metal panel allowed mice to gain entrance into a metal building. The step flashing covers the bottom of metal panel ridges. The step flashing at this corner did not cover the bottom of metal panels, leaving a gap for mice to gain entrance into the building.

Bottom corner of metal siding with a gap in step flashing

Remove the corner metal cover trim to expose the metal sidings. Place aluminum wire screen under the metal panel ridge; caulk the aluminum screen in place; and use additional fastener to secure metal siding in place. Reinstall corner cover.

sheet metal screw secures edge of 2 corner panels closed
aluminum wire screen behind panel
caulk
gap at corner of step flashing allowed mice access

Corner metal cover trim removed

Example 3 Gap between door C-trim and vertical metal panel ridge. Fill ridge gap with aluminum wire screen to block mice access.

Left: vertical ridge located away from the end of step flashing and door C-trim.
Right: vertical ridge located at the door C-trim; metal panel ridge not covered by step flashing, leaving a gap for mice access.

Bottom view of the right image showing the gap between the metal panel ridge and wall. Plug the gap with aluminum wire screen.

Example 4 Corner of metal building with horizontal metal panels. Remove the corner cover trim to expose horizontal metal panels. Fill horizontal ridges with aluminum wire screen, and install more nails to close gaps. Check bottom sill plate area for gaps, as mice starts at ground level.

Bottom corner of metal building with horizontal sidings.

Corner cover removed to expose metal siding ridges

Large gaps between metal siding and stud allow mice access.

Close gaps between metal panel ridge and stud with additional nails. Fill gaps between panel ridges and stud with aluminum wire screen; and between sill plate and bottom of metal panel.

Example 5: Overhead door gasket shrink over time, leaving a gap between floor and gasket for mice to enter. Use pop rivets to attach aluminum screen around gasket. If there is a gap in the gasket, insert aluminum screen inside the gasket to fill in the gap.

Overhead door

Close-up of bottom corner of overhead door. Aluminum wire screen was installed years ago but over time the bottom gasket shrunk, leaving a gap between floor and gasket for mice to enter the building.

Block mice entrance with aluminum wire screen. Wrap aluminum wire screen around gasket, and pop rivet it in place; fill in gasket gaps with aluminum wire screen.

Example 6 Non climb barrier using 14 inch (35 cm) wide galvanized roof flashing around a bag of meat and bone meal fertilizer on top of a pallet. Subsequently, no evidence of mouse activity inside the protected area found after installing the barrier.

Example 7 Non climb barrier using aluminum flashing attached to post and stainless steel tape attached to wire cable to block mice access. Subsequently, stainless steel replaced aluminum flashing. As aluminum flashing oxidizes with prolong exposure to outdoor environment, mice succeeded in traversing the aluminum flashing with an oxide coating.

Stainless steel wrapped around post to prevent mice climbing up.

Example 8 Stainless steel tape (available from automotive parts store) wrapped around 4 legs of a table successfully blocked mice access to table top.

Example 9: Non climb barrier using aluminum flashing surrounding a tree trunk as barrier against rodent and snake access to a bird house above the barrier; photo taken from a local wildlife refuge

Example 10 The concrete steps reposition over the years. Eventually, a gap between concrete stem wall and concrete step formed, allowing mice to chew through the sill plate.

Concrete steps at front entrance

Front masonry facade removed and reveal hole at corner of concrete stem wall and concrete steps. Wire probe inserted between stem wall and step to confirm breach.

Example 11 Eventually, the galvanized plate covering the water pipe entrance through the concrete stem wall corroded. Mice easily pushed aside the fiberglass behind the corroded galvanized plate to gain entrance into the crawl space. Replace the old cover plate with stainless steel plate. First, cover the copper water pipe with a plastic tube to prevent corrosion between 2 dissimilar metals (copper and stainless steel) before installing stainless steel plate.

Water pipe entrance into building and black corrugated drain pipe

Wrap copper pipe with plastic tube then block the entrance with stainless steel plate

Water pipe protected by stainless stee plate; corrugated black drain pipe.

Example 12 Front door of metal building

Mice entered at bottom corner of metal door trim indicated by arrow.

A 3/8 inch (10 mm) gap was sufficient for mice to enter into building.

Block gap with aluminum wire screen covered with caulk.

Example 13 Use orange marking chalk to track mice and chipmunk footprints. For additional information see SM Vantassel, 2017. Using non-toxic tracking powders to identify and follow vertebrate pest movement'. Vertebrate Pest Videos, Montana Department of Agriculture, USA

Orange marking chalk and tray of marking chalk used to identify mice and chipmunk points of entry into barn

Mice and chipmunk entry point into barn

Blue arrows point to faint orange footprints made by chipmunk exiting barn.

Chipmunk footprints, pairs of large hind and smaller front footprints

Orange chipmunk footprints on red wheel bearing grease and grease coated stainless steel. Oils that failed to stop chipmunk include engine motor oil, transmission-hydraulic fluid, mineral oil, horticultural all-season spray oil, WD-40 specialist silicone spray, and silicone oil (100 and 5000 cSt viscosity). Grease, oil and stainless steel would stop mice but not chipmunk.

Original sliding door channel without blockers

Wood and steel blockers to be installed

Blockers, fully installed

View of sliding door with mice and chipmunk blocker

Example 14 mice entered Ford Ranger and Chevy S10 cab through air vent cowl located between windshield and hood.

1987 Ford Ranger air vent cowl and windshield wiper, before adding screen to block mice entry.

Left: screen added on top of air vent cowl. Right: screen added under air vent cowl.

1986 Chevy S10 truck air vent cowl and windshield wiper. Orange marking chalk was used to identify mice activity inside cab at dashboard air vent.

Chevy S10 truck air vent cowl. Arrow points to one of two mice entry points, blocked by aluminum wire screen.